

ABSTRACT

An object of the present invention is to provide a photosensitive resin printing plate precursor capable of forming a protruding relief pattern without using any original pattern film.

Specifically, the present invention relates to a photosensitive resin printing plate precursor including: a photosensitive resin layer (A) containing a water-soluble or water-dispersible resin and an ultraviolet-curable monomer; and a water-insoluble heat-sensitive mask layer (C) containing an infrared-absorbing material, deposited in that order on a support.

By introducing a crosslinked structure or a hydrophobic constituent to the heat-sensitive mask layer (C) so as to be insoluble in water, difference in polarity is produced between the layers (A) and (C) and, thus, mass transfer between the two layers can be prevented. Also, the scratch resistance of the heat-sensitive mask layer (C) can be dramatically enhanced and, thus, the printing plate precursor becomes easy to handle.